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| Notice of Allowability | 10/627,593 | /627,593 ZHU ET AL. | |
| | Examiner | Art Unit | |
| | Lin Liu | 2145 | |
| The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS | pears on the cover sheet w | ith the correspondence address | |
| herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31 | i) or other appropriate commRIGHTS. This application is | unication will be mailed in due cou | rse. THIS t the initiative |
| 1. X This communication is responsive to <u>06/12/2007</u> . | | | |
| 2. ☑ The allowed claim(s) is/are <u>1 and 16</u> . | | | |
| 3. ☐ Acknowledgment is made of a claim for foreign priority t a) ☐ All b) ☐ Some* c) ☐ None of the: | ınder 35 U.S.C. § 119(a)-(d) | or (f). | |
| 1. Certified copies of the priority documents have | ve been received. | | |
| 2. Certified copies of the priority documents have | e been received in Applicati | on No | |
| 3. Copies of the certified copies of the priority de | • • | | from the |
| International Bureau (PCT Rule 17.2(a)). | • | 5 | |
| * Certified copies not received: | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON! THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | e a reply complying with the requir | ements |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subr INFORMAL PATENT APPLICATION (PTO-152) which give | | | ICE OF |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mu | ust be submitted. | | |
| (a) I including changes required by the Notice of Draftsper | | w (PTO-948) attached | |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date | <u>_</u> , | | |
| (b) including changes required by the attached Examined Paper No./Mail Date | r's Amendment / Comment o | r in the Office action of | |
| Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in | | | ck) of |
| DEPOSIT OF and/or INFORMATION about the dep- attached Examiner's comment regarding REQUIREMENT | OSIT OF BIOLOGICAL MAT FOR THE DEPOSIT OF BI | ERIAL must be submitted. Note OLOGICAL MATERIAL. | e the |
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| Notice of References Cited (PTO-892) Dotice of Draftperson's Patent Drawing Review (PTO-948) | | nformal Patent Application | |
| 2. Motice of Dranperson's Patent Drawing Review (P10-940) | | Summary (PTO-413), ./Mail Date | |
| Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date | | Amendment/Comment | |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. 🛛 Examiner's | Statement of Reasons for Allowa | nce |
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| | | JASON CARDONE SUPERVISORY PATENT EXA | MINER |

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

- 2. Authorization for this examiner's amendment was given in a telephone interview with O'Hagan, Timothy on August 15, 2007.
- 3. The application has been amended as follows:

Claim 1. (Currently Amended) A video mail server comprising:

a video call signaling module coupled to an internet protocol network via an internet protocol services module for:

establishing a first internet protocol channel with a caller remote internet video device to support a recording session over the internet protocol network; and

establishing a second internet protocol channel with a user remote internet video device to support a playback session over the internet protocol network;

a media interface coupled to the internet protocol network via the internet protocol services module and comprising:

a recording module for obtaining a recording sequence of compressed images representing motion video from the caller remote internet video device and storing a video mail file representing the recording sequence of

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compressed images in a storage; each compressed image frame within the video mail file being one of:

an independent frame from which a video image frame can be recovered utilizing only the independent frame; and

a dependent frame from which the video image frame can only be recovered utilizing both the dependent frame and an independent frame preceding the dependent frame in the sequence;

a play back module for;

retrieving the recording sequence of compressed images from storage and transferring such recording sequence of compressed images as a playback sequence of compressed images to the user remote internet video device;

receiving a lost frame message from the user remote internet, video device when the user remote internet video device detects loss of a frame within the playback sequence of compressed images; and

substituting a lost frame correction frame an independent frame from a video codec encoder module into the playback sequence of compressed images in response to receiving such lost frame message;

a video codec comprising a decoder module and an encoder module;

the decoder module i) receiving the recording sequence of compressed images from the storage; and ii) decoding the recording sequence of compressed images to generate motion video images;

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the encoder module encodes a motion video image, as a lost frame correction frame; and

a delay buffer for delaying the playback sequence of compressed images for a period of time such that each frame within the playback sequence of compressed images is queued for transfer to the user remote Internet device at a time when a corresponding lost frame correction frame independent frame is available from the encoder module for substitution in the playback sequence of compressed images.

Claims 2-15 Cancelled.

Claim 16. (Currently Amended) A method of recording and playing back video mail, the method comprising:

establishing a first internet protocol channel with a caller remote Internet video device to support a recording session over the internet protocol network;

establishing a second internet protocol channel with a user remote

Internet video device to support a playback session over the internet protocol
network;

obtaining a recording sequence of compressed images from the caller remote internet video device;

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storing a video mail file representing the recording sequence of compressed images in a storage; each compressed image frame within the video mail file being one of:

an independent frame from which an image frame can be recovered utilizing only the independent frame; and

a dependent frame from which the image frame can only be recovered utilizing both the dependent frame and an independent frame preceding the dependent frame in the sequence;

retrieving the recording sequence of compressed images from storage and transferring such recording sequence of compressed images as a playback sequence of compressed images to the user remote internet video device;

simultaneously decoding the recording sequence of compressed images to generate motion video images and encoding each motion video image as a lost frame correction frame;

receiving a lost frame message from the user remote internet video device when the user remote internet video device detects loss of a frame within the playback sequence of compressed images; and

substituting a lost frame correction frame an independent frame from a video codec encoder module into the playback sequence of compressed images in response to receiving such lost frame message; and

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wherein the playback sequence of compressed images is delayed for a

images is queued for transfer to the user remote internet device at a time when a

period of time such that each frame within the playback sequence of compressed

corresponding lost frame correction frame independent frame is available for

substitution in the playback sequence of compressed, images.

Claims 17–30 Cancelled.

Allowable Subject Matter

- 4. Claims 1 and 16 allowed.
- 5. The following is an examiner's statement of reasons for allowance:

The claimed invention is directed toward a video mail server comprising a play back module at the server, which in response to receiving a lost frame message from the user remote internet video device, substitutes an independent frame from a video codec encoder module into the playback sequence of compressed images that is being streamed to the client. The prior art of record taking singly or in combination does not teach or suggest a combination of method steps as claimed that is used to correct the video mail file due to lost frames by substituting an independent frame from a video codec encoder module into the playback sequence of compressed images that is being streamed to the client. The closest prior art of record (i.e Walter (Publication no.: US 2001/0052019), Belknap (publication no.: US 2003/0002854 A1) and Campbell (publication no.: US 2003/0140159 A1)) does not teach or suggest this feature. Based on this reasoning, claim 16 is allowable over the prior art of record.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Liu whose telephone number is (571) 270-1447. The examiner can normally be reached on Monday - Friday, 8:00am - 5:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

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Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

L. Liu 08/15/2007

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